

MANIPULATING PRE-EXHAUSTION AND DROP SET METHODS OF RESISTANCE TRAINING

The purpose of this study⁽³⁾ was to examine the total work output when different orders and types of training systems, or protocols, were used. In other words, does placing the drop set before or after a 10RM exercise set make a difference in terms of total work? Also, does it make a difference whether single-joint or multijoint exercises are performed during the drop set (weight training sets in which the weight is decreased in each subsequent set)? A single-joint exercise followed by a multijoint exercise generally is referred to as the pre-exhaust method, whereas a multijoint exercise followed by a single-joint exercise may be called a post-exhaust method. A drop set, in contrast, is where the weight load is decreased gradually over several sets while the number of repetitions per set remains the same. No rest period typically is allowed between the sets. The protocol used in this study was 10RM + 80% 10RM + 60% 10RM with no rest periods.

Research on various resistance training techniques (protocols or systems) is scarce, and much of what is practiced in gyms across the country is based on anecdotal, not scientific, evidence. The 22 trained male subjects in this study were assigned randomly to four different strength training sessions on nonconsecutive days. Previously, on different days, a 10RM was assessed for both the bench press and the chest fly. The four sessions followed the protocols below:

V3: bench press with drop set, 10RM chest fly (multijoint then single joint)

V4: 10RM bench press, chest fly with drop set (multijoint then single joint)

V5: chest fly with drop set, 10RM bench press (single joint then multijoint)

V6: 10RM chest fly, bench press with drop set (single joint then multijoint)

The major finding was that more total work was produced when the drop set occurred during the bench press (multijoint) exercise, regardless of the order. Therefore, if muscle hypertrophy or increased strength is the goal, including drop sets in the workout may be beneficial, as more total work may be performed.